

CLAIMS

1. A tamper-resistant remotely monitorable electronic seal comprising:
a shaft portion;
a socket arranged to engage said shaft portion in a monitorable manner,
whereby disengagement of said socket and said shaft portion results in a monitorable event; and
a wireless communicator associated with at least one of said shaft portion and said socket and being operative to provide a remotely monitorable indication of said monitorable event.
2. A tamper-resistant remotely monitorable electronic seal according to claim 1 and wherein said shaft portion includes at least one conductive path which is interrupted in response to disengagement of said socket and said shaft portion and wherein said wireless communicator is operative to provide a remotely monitorable indication of the monitorable event.
3. A tamper-resistant remotely monitorable electronic seal according to claim 2 and wherein:
said shaft portion comprises a frangible shaft portion having a press-fit tip;
said socket comprises a press-fit socket arranged to engage said press-fit tip in a destructably removable manner, whereby disengagement of said socket and said shaft portion results in breakage of said shaft portion;
said at least one conductive path extends at least through said shaft portion and is breakable in response to breakage of said shaft portion; and
said wireless communicator is associated with at least one of said shaft portion and said press-fit socket and is operative to provide a remotely monitorable indication of the integrity or lack of integrity of said at least one conductive path.

4. A tamper-resistant remotely monitorable electronic seal according to claim 3 and wherein said at least one conductive path is defined by conductors extending through said shaft portion which are in electrical contact with a conductor formed in said press-fit socket when said shaft portion and said socket are in press-fit engagement.

5. A tamper-resistant remotely monitorable electronic seal according to claim 3 and wherein said communicator is located in a sensing circuitry and communicator housing integrally formed with said shaft portion.

6. A tamper-resistant remotely monitorable electronic seal according to claim 3 and wherein said frangible shaft portion comprises at least one frangible location having relatively weak mechanical strength as compared with other portions of the shaft portion.

7. A tamper-resistant remotely monitorable electronic seal according to claim 3 and wherein said press-fit tip comprises a toothed tip.

8. A tamper-resistant remotely monitorable electronic seal according to claim 3 and wherein said at least one conductive path comprises at least one reed switch which is operated by a magnet associated with said socket whereby when said shaft portion is separated from said socket for any reason, said at least one conductive path is broken.

9. A tamper-resistant remotely monitorable electronic seal according to claim 2 and wherein:

said shaft portion comprises a frangible shaft portion having a lockable portion;

said socket comprises a locking element arranged to engage said lockable portion in a destructably removable manner, whereby disengagement of said locking element and said shaft portion results in breakage of said shaft portion;

said at least one conductive path extends at least through said shaft portion and is breakable in response to breakage of said shaft portion; and

said wireless communicator is associated with at least one of said shaft portion and said socket and is operative to provide a remotely monitorable indication of the integrity or lack of integrity of said at least one conductive path.

10. A tamper-resistant remotely monitorable electronic seal according to claim 9 and wherein said at least one conductive path comprises at least one reed switch which is operated by a magnet associated with said socket whereby when said shaft portion is separated from said socket for any reason, said at least one conductive path is broken.

11. A tamper-resistant remotely monitorable electronic seal according to claim 9 and wherein said at least one conductive path comprises at least one reed switch which is operated by a magnet associated with said socket whereby when said shaft portion is separated from said socket for any reason, said at least one conductive path is broken, and is defined by conductors extending through said shaft portion and which are in electrical contact with a conductor formed in said socket when said shaft portion and said socket are in lockable engagement.

12. A tamper-resistant remotely monitorable electronic seal according to claim 9 and wherein said communicator is located in a sensing circuitry and communicator housing integrally formed with said shaft portion.

13. A tamper-resistant remotely monitorable electronic seal according to claim 9 and wherein said frangible shaft portion comprises at least one frangible location having relatively weak mechanical strength as compared with other portions of said shaft portion.

14. A tamper-resistant remotely monitorable electronic seal according to claim 9 and wherein said shaft portion comprises a groove adaptable for lockable engagement with said locking element .

15. A tamper-resistant remotely monitorable electronic seal according to claim 1 and wherein said wireless communicator is a transceiver.